(c) and (d) Indian Science, as judged by the Scientific Research publications has improved over the last twenty five years. The absolute number of research publications has gone up from 14983 in 1980 to 19448 in 2005. However, our contribution as percentage of world publications has declined from 2.9% in 1980 to 1.9% in 2005. Considering the current status of science, the Government had already taken significant measures such as: setting up of three new Indian Institutes of Science Education and Research (IISER); funds for rejuvenating basic research and higher education in university sector; establishment of new research centres of excellence; strengthening of Research and Development infrastructure in academic institutions and research laboratories, institution of fellowships for encouraging young and active scientists, specific programmes for encouraging women scientists. The Government is also considering to provide a number of new opportunities to students to take up science as a career.

Government has recognized that the competitiveness of Indian Science and Technology (S&T) system is under challenge on account of large scale investments in other countries in Asia-Pacific region in S&T. This is based on scientific analysis. The Government is proposing to address the issue of right sizing the investments into S&T and higher education sector during the Eleventh Plan period.

Level of R and D in Scientific Institutions

2532. SHRI JANARDHANA POOJARY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the level of R&D in all the major scientific institutes and universities in the country has gone down in comparison to other developing countries;

(b) if so, the details thereof;

(c) whether one of the reasons for such set back is that research scholars in various disciplines are not being provided the requisite facilities and financial assistance to carry out their research properly; and

(d) if so, the details thereof and measures taken to improve the R&D environment in the country?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (d) No,Sir. As per the "The Global Competitiveness Report 2005-2006" brought out by the World Economic Forum, India is ranked at 17th position for the quality of scientific research institutions and universities as compare to Korea and China which are ranked at 19th and 55th position respectively.

In order to give further impetus to R&D activities the Government has framed policies and various schemes to encourage scientists to pursue research in the area of their interest in the country. The various measures taken from time to time are:

Policies:

- Science and Technology Policy, 2003.
- Increase in the outlay for science and technology sector in successive Five Year Plans.
- Delegation of enhanced administrative and financial powers to S&T institutions to improve working conditions of scientists.

Programmes targeted towards young scientists:

- Swarnajayanti Fellowships.
- Fast Track Scheme for Young Scientists.
- SERC Visiting Fellowships.
- SERC Schools in emerging areas of science and technology.
- Better Opportunities for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST) fellowship to visit international laboratories and institutions.
- Mission HOPE (Higher Education-Opportunities for Promoting Entrepreneurship) with the aim of converting aspirations to real enterprises (CARE).
- Contact programmes to attract and motivate brilliant young scientists to take up R&D as a career.
- Junior/Senior research fellowships, research associateships and senior research associateships.

- Diamond Jubilee Research Interns Award Scheme, JRF-GATE and Entrepreneurship support to research scholars.
- Early Faculty Induction Programme, which aims at attracting bright and young under-graduate students in Engineering and Technology/ Pharmacy/Architecture, etc. to take teaching as their career.
- S&T based training for entrepreneurial development.
- Women Schientists Scheme.

Programmes targeted towards performing scientists:

- The Ramanujan Fellowships.
- The JC Bose National Fellowships.
- The Ramanna Fellowships.
- Shyama Prasad Mukherjee Fellowships.
- SERC Individual Projects.
- Financial assistance to scientists to participate in international conferences and training programmes.
- Opportunities to distinguished scientists and technologists of Indian origin settled abroad for short term technical assignments to assist in frontier and emerging areas of S&T.
- Post-doctoral Fellowships in Biotechnology and Life Sciences.

Infrastructure development programmes:

- Intensification of Research in High Priority Areas (IRHPA).
- Fund for improvement of S&T infrastructure in Higher Educational Institutions (FIST).
- Setting up of centres of excellence/advanced studies in the universities and academic institutions.
- Creation of core groups of professionals with necessary modern facilities required for pursuing research in new and frontier areas of science.
- Creation of new scientific Departments/Organisations.